

BEFORE THE BOARD OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES

STATE OF UTAH

IN THE MATTER OF THE REQUEST FOR AGENCY ACTION OF WHITING OIL AND GAS CORPORATION FOR AN ORDER AUTHORIZING THE VENTING OR FLARING OF GAS FROM THE MORONI 11M-1107 WELL LOCATED IN SECTION 11, TOWNSHIP 15 SOUTH, RANGE 3 EAST, S.L.M., SANPETE COUNTY, UTAH

[PROPOSED] FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER

Docket No. 2015-001

Cause No. 176-05

This Cause came on regularly for hearing before the Utah Board of Oil, Gas and Mining (the "Board") on Wednesday, January 27, 2016, at the hour of 9:00 a.m. in the Auditorium of the Department of Natural Resources, 1594 West North Temple, Salt Lake City, Utah. The following Board members were present and participated at the January 27, 2016 hearing: Ruland J Gill, Jr., Chairman, Carl F. Kendell, Chris D. Hansen, Susan S. Davis, Gordon L. Moon, and Richard Borden. John R. Baza, Director; John Rogers, Associate Director—Oil and Gas; and Dustin Doucet, Petroleum Engineer, were present for the Utah Division of Oil, Gas and Mining (the "Division"). The Board was represented

by Michael S. Johnson, Assistant Attorney General, and the Division was represented by John Robinson, Jr., Assistant Attorney General.

The petitioner, Whiting Oil and Gas Corporation ("Whiting"), was represented by Thomas W. Clawson of MacDonald & Miller Mineral Legal Services, PLLC, and Paul Joeckel, Whiting's Landman, and Ralph Nelms, Whiting's Petroleum Engineer, testified on behalf of petitioner. The Board recognized Mr. Nelms as an expert reservoir engineer for the purposes of the January 27, 2016 hearing in this Cause. Respondent International Petroleum Limited Liability Company ("Respondent") was represented by Anthony T. Hunter. By letter dated January 16, 2016, which was filed with the Board on January 25. 2016, D&D Harvey Sanpete LLC ("D&D"), the owner of the surface location for the Moroni #11M-1107 Well and a mineral interest owner of that well, expressed its support of Whiting's request to flare the associated gas from the well. During the hearing, the Division also expressed its general support of granting Whiting's Amended Request for Agency Action (the "Amended Request") as conformed to the testimony and presentation given at the hearing. Other than Whiting, Respondent, the Division, and D&D, no other person or party filed a response to Whiting's Amended Request and no other person or party appeared at or participated in this Cause at the April 22, 2015 or January 27, 2016 hearings.

Whiting filed its original Request for Agency Action on December 11, 2014. On January 12, 2015, Respondent filed its Response to Request for Agency Action. By Order issued on April 7, 2015, the Board granted Whiting's Motion for Leave to Amend Request for Agency Action, which permitted Whiting to file its Amended Request in the form attached to the motion. To allow completion operations on the Moroni #11M-1107 Well (the "Well") to be completed before hearing this matter, the Board continued this Cause three times from the Board's regularly scheduled January 28, 2015 hearing to the Board's April 22, 2015 regularly scheduled hearing. This Cause came on regularly for hearing at the Board's April 22, 2015 hearing. During the course of that hearing, for the purposes of augmenting the record in this Cause and based on the Division's counsel's oral motion, the Board took official notice of the record in Cause No. 176-06, a pending spacing proceeding for the Well filed by Respondent and its co-petitioner Bro Energy, LLC. At the conclusion of the April 22, 2015 hearing, the Board: (1) authorized the temporary flaring of the Well until the Board's regularly scheduled January 2016 hearing to facilitate the gathering and analysis of additional production data from the Well; and (2) continued this Cause until that hearing, at which time Whiting was to report to the Board on the results of the additional production testing of the Well, as provided in the Findings of Fact, Conclusions of Law, and Interim Order issued by the Board on June 4, 2015 (the "Interim Order").

The Board, having considered the testimony presented and the exhibits received into evidence at the April 22, 2015 and January 27, 2016 hearings, being fully advised, and for good cause, hereby makes the following findings of fact, conclusions of law, and order in this Cause.

FINDINGS OF FACT

- 1. Notices of the time, place, and purposes of the Board's regularly scheduled April 22, 2015 hearing were mailed to all interested parties by first-class mail, postage prepaid, and were duly published in the <u>Salt Lake Tribune</u>, <u>Deseret Morning News</u>, newspapers of general circulation in Salt Lake City and County, and the <u>Sanpete Messenger</u>, <u>Gunnison Valley Gazette</u>, and the <u>Pyramid</u>, newspapers of general circulation in Sanpete County, Utah, pursuant to the requirements of Rule R641-106-100, Utah Administrative Code ("U.A.C."). Copies of Whiting's Amended Request were mailed to all interested parties pursuant to Rule R641-104-135, U.A.C.
- 2. Whiting is a Delaware corporation in good standing, having its principal place of business in Denver, Colorado. Whiting is licensed to do business, and is doing business, in the State of Utah.
- 3. Whiting filed its original Request for Agency Action on December 11, 2014. By Order issued on April 7, 2015, the Board granted Whiting's Motion for Leave to Amend Request for Agency Action, which permitted Whiting to file its Amended Request. On or

about January 12, 2015, Respondent filed its Response to Request for Agency Action, in opposition to Whiting's original Request. Respondent renewed its opposition to Whiting's Amended Request at the April 22, 2015 and January 27, 2016 hearings.

- 4. The Well is a horizontal well completed in the Tununk Member of the Mancos Shale formation. The Well's surface location is situated in the SW¼SW¼ of Section 11, Township 15 South, Range 3 East, S.L.M., and the Well's bottomhole location (terminal lateral) is situated in the SE¼SE¼ of the same section. Whiting is the operator of the Well.
- 5. The Well is located on and traverses numerous fee (private) oil and gas leases, including leases owned by Respondent.
- 6. The Well and associated leases are currently subject to the Board's default well-location and siting rules governing horizontal wells, which establish a temporary 640-acre well-siting area consisting of all of subject Section 11 for the purposes of determining well density and location.
- 7. The Tununk Member of the Mancos Shale formation in the vicinity of the Well is sparsely drilled and its potential as a hydrocarbon reservoir is relatively unexplored. Based on the horizontal drilling and completion techniques Whiting employed to drill the Well, the Board recognizes that the Well is an exploratory wildcat well.

- 8. The Well was spud on August 27, 2014, and completion operations (drilling frac plugs) were completed on March 17, 2015. First production occurred on February 14, 2015, prior to the completion of flowback operations.
- 9. The Well produced from February 14, 2015, to April 8, 2015, after which the Well was shut in to allow the pressure to build up. The production for the Well during that period was erratic, but from mid March to early April 2015 the Well averaged about 400-500 mcf of gas per day ("MCFPD"). The Well's production during that period, however, was erratic, rendering such average production rates unreliable. At the time of the Board's April 22, 2015 hearing, the production from the Well had not stabilized. Whiting's expert witness testified at the April 2015 hearing that he could not accurately evaluate the economic viability of either the Well or the Tununk reservoir based on such erratic production.
- 10. Whiting's evidence adduced and received at the April 22, 2015 hearing established that additional production and reservoir testing was required to perform a reliable economic evaluation of the Well and reservoir according to rule, and that there was no economically reasonable alternative to temporarily flaring the associated gas produced from the Well during such additional production testing.
- 11. At the conclusion of the April 22, 2015 hearing, the Board: (1) authorized the temporary flaring of the associated gas from the Well until the Board's regularly

scheduled January 2016 hearing; and (2) continued this Cause until that hearing as provided in the Interim Order.

- 12. The Well was put back on production after the April 22, 2015 hearing and produced oil and associated gas from May 2015 to December 22, 2016, when it was shutin due to low oil and gas prices and downhole mechanical problems. At the time the Well was shut in, it was producing approximately 30 barrels of oil per day ("BOPD") and 120 MCFPD.
- 13. During its regularly scheduled January 27, 2016 hearing, the Board re-heard Whiting's Amended Request. At that hearing, Whiting reported to the Board the results of the additional production testing of the Well and presented its economic evaluation of the Well as required under the Interim Order.
- 14. The Well has cumulatively produced approximately 18,800 barrels of oil (18.8MBO) and 55,600 MCF of associated gas (55.6MMCF). All of the associated gas produced from the Well has been flared.
- 15. The gas production from the Well generally has declined since the Well first produced. Whiting estimates that gas production from the Well will continue to decline, and that at some point in the future the Well will produce less than 1,800 MCF of gas per month. Whiting testified that the Well could reach that level of gas production by the end of 2016 if the Well were placed back into production in the near future. Pursuant to the

Board's rules, up to 1,800 MCF of associated gas may be flared from an individual well on a monthly basis at any time without requiring either the Board's or Division's approval (see Rule R649-3-20(1.1), U.A.C.).

- 16. Gas composition analyses show that the Well is producing methane gas along with volumes of natural gas liquids (NGLs), including significant quantities of ethane. The treatment, liquification, and removal of the ethane before the methane can be placed into a pipeline can significantly affect the expense of a gas plant and the economic viability of developing the Well and the Tununk reservoir in the vicinity of the Well.
- 17. The estimated ultimate recovery ("EUR") for the Well is 35 MBO and 123 MMCF of gas.
- 18. Whiting testified that based on the EUR and the projected production decline curves as presented at the January 27, 2016 hearing, the expected remaining economic lifetime for the Well is approximately three years.
- 19. At the January 27, 2016 hearing, Whiting requested that it be allowed to flare the associated gas from the Well for three years or until the Well produces an additional 50 MMCF of gas (a volume commensurate with the three-year production period), whichever limiting event occurs first. In addition, Whiting requested that the three-year period be tolled (suspended) during any periods when the Well is shut in.

- 20. Whiting's evidence adduced and received at the January 27, 2016 hearing established that currently there is no economically feasible alternative to flaring the associated gas produced from the Well during the Well's expected remaining economic lifetime.
- 21. Based on the evidence provided, the Board has determined that flaring the remaining associated gas produced from the Well, subject to the conditions as provided herein, is justified under the circumstances.
 - 22. Whiting testified that the Well is using 20 MCFPD for lease operations.
- 23. The Board voted to approve Whiting's Amended Request to authorize the flaring of the associated gas from the Well for a period of three years—that period to be tolled (suspended) during any periods when the Well is shut-in—or until an additional 50MMCF is produced, whichever limiting event occurs first, subject to the conditions as stated herein.

CONCLUSIONS OF LAW

1. Due and regular notice of the times, places, and purposes of the Board's regularly scheduled April 22, 2015 hearing and its January 27, 2016 hearing was given to all interested parties whose legally protected interests are affected by the Amended Request in the form and manner and within the time required by law and the Rules and Regulations of the Board and Division. Due and regular notice of the filing of the Amended Request

was given to all interested parties in the form and manner and within the time required by law the Rules and Regulations of the Board.

- 2. The Board has jurisdiction of all the interested parties and subject matter of the Amended Request pursuant to Section 40-6-5(3)(f) of the Utah Code and Rules R649-3-19 and R649-3-20(5), U.A.C., and has the power and authority to make and promulgate the order herein set forth.
- 3. Whiting has satisfied the requirements set forth in Rule R649-3-20(5), U.A.C., for granting its Amended Request to flare the associated gas from the Well for a period of three years, or until 50 MMCF of associated gas is produced, whichever limiting event occurs first, subject to the conditions stated herein.
- 4. The terms and conditions of flaring beyond the limits authorized under Rule R649-3-20(1.1), U.A.C., for the Well are fair, just, and reasonable under the circumstances and will not result in waste.
- 5. Whiting has sustained its burden of proof, demonstrated good cause, and satisfied all legal requirements for the granting of the Amended Request as ordered below.
- 6. Pursuant to Rule R649-3-20(1.1), U.A.C., up to 1,800 MCF of oil well (associated) gas may be flared from an individual well on a monthly basis at any time without approval.

ORDER

Based upon the Amended Request, testimony and evidence submitted at the April 22, 2015 hearing and the January 27, 2016 hearing, and the findings of fact and conclusions of law as stated above, the Board hereby orders:

- 1. Whiting's Amended Request in this Cause is granted as follows:
 - a. Whiting is hereby authorized to flare associated gas from the Well for a period of up to three years beginning as of January 27, 2016, or until a total of 50 MMCF of associated gas is produced from the Well in addition to the associated gas that already has been produced from the Well as of January 27, 2016, whichever limiting event occurs first. The three-year period shall be tolled (suspended) during any periods when the Well is shut in.
 - b. In the event that either limiting event occurs, Whiting shall appear before the Board for further review of the circumstances surrounding the Well and whether further flaring of the Well is warranted.
 - c. If the Well is shut in, Whiting shall submit a report of such to the Division, with a copy to the file in this Cause, including without limitation, the cumulative production of oil and gas from the Well to date and the date that the tolling of the three-year period commenced (i.e., the

date the Well was shut in). During periods when the Well is shut in, Whiting shall periodically report to the Division in order to update the Division as to the circumstances surrounding the Well. If the Well is placed back on production, Whiting shall submit a report of such to the Division, with a copy to the file in this Cause, including without limitation, the date that the three-year period (as extended) will expire based on the length of the most recent tolling period.

- d. If the production of the associated gas from the Well drops below 1,800 MCF per month for 6 consecutive months, this Order shall automatically terminate without any further action being required by Whiting, the Division, or the Board.
- 2. This Order authorizes only the flaring of associated gas from the Well; no venting of associated gas is authorized hereunder.
- 3. In the event the Division determines that there is a material change in the circumstances surrounding the Well that bear on the Board's flaring approval (including, by way of example, but not strictly limited to, the reworking or recompletion of the Well, or the drilling of and production from an additional well or wells in the vicinity of the Well, either of which may show that an alternative to the flaring of the associated gas from the Well may be

economically feasible), the Division shall report the nature of such to the Board and the Board may take whatever action it deems reasonable and prudent under the circumstances in accordance with the appropriate statutes and rules.

- 4. Pursuant to Utah Admin. Code Rules R641 and Utah Code Ann. §§ 63G-4-204 to 208, the Board has considered and decided this matter as a formal adjudication.
- 5. This Order is based exclusively on evidence of record in the adjudicative proceeding or on facts officially noted, and constitutes the signed written order stating the Board's decision and the reasons for the decision, all as required by the Administrative Procedures Act, Utah Code Ann. § 63G-4-208 and Utah Administrative Code Rule R641-109.
- 6. Notice re: Right to Seek Judicial Review by the Utah Supreme Court or to Request Board Reconsideration: As required by Utah Code Ann. §§ 63G-4-208(e) (g), the Board hereby notifies all parties in interest that they have the right to seek judicial review of this final Board Order in this formal adjudication by filing a timely appeal with the Utah Supreme Court within 30 days after the date that this Order issued. Utah Code Ann. §§ 63G-4-401(3)(a) and 403. As an alternative to seeking immediate judicial review, and not as a prerequisite to seeking judicial review, the Board also hereby notifies parties that they may elect to request that the Board reconsider this Order, which constitutes a final

agency action of the Board. Utah Code Ann. § 63G-4-302, entitled, "Agency Review – Reconsideration," states:

- (1)(a) Within 20 days after the date that an order is issued for which review by the agency or by a superior agency under Section 63G-4-301 is unavailable, and if the order would otherwise constitute final agency action, any party may file a written request for reconsideration with the agency, stating the specific grounds upon which relief is requested.
- (b) Unless otherwise provided by statute, the filing of the request is not a prerequisite for seeking judicial review of the order.
- (2) The request for reconsideration shall be filed with the agency and one copy shall be sent by mail to each party by the person making the request.
- (3)(a) The agency head, or a person designated for that purpose, shall issue a written order granting the request or denying the request.
- (b) If the agency head or the person designated for that purpose does not issue an order within 20 days after the filing of the request, the request for reconsideration shall be considered to be denied.

Id. The Board also hereby notifies the parties that Utah Admin. Code Rule R641-110-100, which is part of a group of Board rules entitled, "Rehearing and Modification of Existing Orders," states:

Any person affected by a final order or decision of the Board may file a petition for rehearing. Unless otherwise provided, a petition for rehearing must be filed no later than the 10th day of the month following the date of signing of the final order or decision for which the rehearing is sought. A copy of such petition will be served on each other party to the proceeding no later than the 15th day of the month.

Rehearing. If there is any conflict between the deadline in Utah Code Ann. § 63G-4-302 and the deadline in Utah Admin. Code Rule R641-110-100 for moving to rehear this matter, the Board hereby rules that the later of the two deadlines shall be available to any

Id. See Utah Admin. Code Rule R641-110-200 for the required contents of a petition for

party moving to rehear this matter. If the Board later denies a timely petition for rehearing,

the party may still seek judicial review of the Order by perfecting a timely appeal with the

Utah Supreme Court within 30 days thereafter.

The Board retains continuing jurisdiction over all the parties and over the subject matter of this cause, except to the extent said jurisdiction may be divested by the filing of a timely appeal to seek judicial review of this order by the Utah Supreme Court.

For all purposes, the Chairman's signature on a faxed copy of this Order shall be deemed the equivalent of a signed original.

DATED this _____ day of February, 2016.

STATE OF UTAH BOARD OF OIL, GAS AND MINING

By:		
3,5	Ruland J Gill, Jr., Chairman	

CERTIFICATE OF SERVICE

I hereby certify that, on this 11th day of February, 2016, I caused a true and correct copy of the foregoing Proposed Findings of Fact, Conclusions of Law and Order to be mailed, postage pre-paid, and sent electronically to the following:

Mr. Anthony T. Hunter
Attorney for International Petroleum
Limited Liability Company
4715 W. Central
Wichita, KS 67212
hunterath@gmail.com

Mr. Michael S. Johnson, Esq.
Assistant Attorney General
Attorney for the Board of Oil, Gas and
Mining
1594 West North Temple, Suite 300
P.O.Box 145801
Salt Lake City, UT 84114-5801
mikejohnson@utah.gov

Mr. John Robinson Jr.
Steven F. Alder, Esq.
Assistant Attorneys General
1594 West North Temple #1700
Salt Lake City, UT 84116
jrobinson@utah.gov
stevealder@utah.gov

Thomas W. Clawson